#7-Effect of Agile on Post-Contract Award

Module TLO: Given a DoD program involved in software development using Agile IPM methodology, the student will identify key post-contract award activities that may need to change to enable program analysis and oversight.

Subtopics

- Documentation
- Regulatory oversight
- IBR
- Participating in Agile reviews
- Performance Measurement

ELO

- ELO #1 – Recognize the change in frequency of documentation development in an Agile IPM environment.
- ELO #2 – Identify changes to the role of government agencies/oversight in programs using Agile IPM methodology.
- ELO #3 - Recognize the level of involvement required of stakeholders for Agile processes to be effective.
- ELO #4 – Recognize the parallels between Agile and EVM IPM methodologies.
- ELO #5 - Identify how progress is measured at the team and program levels.

ELO Mapping to Sub-topics

Subtopic	ELO(s)
Documentation	1
Regulatory oversight	2
IBR	2
Participating in Agile reviews	3
Measurement	4, 5

Subtopic 1: Documentation

- Understanding the cadence of documentation development may increase in an Agile program.
  - Incremental delivery of documentation
    - Just enough for a particular iteration
- CDRLs – be careful what you ask for
- Index of Major Takeaways
  - CDRL documentation occurs more frequently in an Agile IPM environment.
- Assessments
  - True/false: CDRL documentation frequency.

Subtopic 2: Regulatory oversight

- Understanding the role of government agencies/oversight in Agile programs.
  - Direction of DCMA, PARCA, AT&L, services etc., Test, Business Systems
  - Service Acquisition Executives
- All these organizations have efforts focused on agile
  - Describe various efforts
  - Links to efforts
- Mindful tailoring?
- Index of Major Takeaways
  - Government oversight requires modification in an Agile IPM environment.
- Assessments

Subtopic 3: IBR

- The WBS can align to a workflow-based waterfall development or an outcome-based Agile structure that focuses on customer driven deliverables.
- Index of Major Takeaways
  1. Government oversight requires modification in an Agile IPM environment.
  2. Requirements will not change, level of detail supporting requirements may change
- Assessments:

Subtopic 4: Participating in Agile reviews

- Understanding the level of involvement required for Agile processes to be effective.
  - Portfolio Management/Road-mapping
  - Release planning
  - Release reviews
  - Iteration Planning
  - Iteration Reviews
- Product owner
- Index of Major Takeaways
  - Stakeholder involvement increases in an Agile IPM environment due to the rapid cycle of incremental planning, development, and review.
- Assessments:

Subtopic 5: Measurement

- Understanding the tools used to provide program insight in an Agile program.
  - Team Level Measure
    - Team productivity should not be used against the team
    - Do not compare one team against another
    - Identify various measures and how they are used
      - Velocity
  - Program Level Measure
    - EV Analyst (platinum card) (contractor EVM tool)
    - Cumulative flow diagram (lean engineering world) – lifecycle, time, bottlenecks, state transitions
    - % of user story point completion (aggregate across teams)
- Measuring work migration
- Understanding Technical Debt
  - Summarize
    - Intentional (strategic & tactical), Unintentional
  - Managing technical debt
    - The good and the bad
    - Effects on Velocity
- Index of Major Takeaways
  - Both Agile and EVM are management methodologies that enable situational awareness across stakeholders and provide the ability to accurately measure and forecast performance.
  - Objective technical completion criteria are essential for evaluating progress and performance regardless of the level at which the measurement occurs.
  - Stakeholders should be aware of the impacts of technical debt and the migration of work in an Agile environment.
- Assessments